



MAJOR SOURCE OPERATING PERMIT

PERMITTEE: NASA - Marshall Space Flight Center

FACILITY NAME: Marshall Space Flight Center

FACILITY/PERMIT NO.: 709-0014

LOCATION: Marshall SFC, AL

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, <u>Ala. Code</u> 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, <u>Ala. Code</u> 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

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TABLE OF CONTENTS

GENERAL PERMIT PROVISOS	6
SUMMARY PAGE FOR SMALL NATURAL GAS BOILERS (APPENDIX A)	17
PROVISOS FOR SMALL NATURAL GAS BOILERS (APPENDIX A)	18
Applicability	18
Emission Standards	18
Compliance and Performance Test Methods and Procedures	18
Emission Monitoring	18
Recordkeeping and Reporting Requirements	18
SUMMARY PAGE FOR SMALL FUEL OIL BOILERS (APPENDIX B)	19
PROVISOS FOR SMALL FUEL OIL BOILERS (APPENDIX B)	20
Applicability	20
Emission Standards	20
Compliance and Performance Test Methods and Procedures	20
Emission Monitoring	20
Recordkeeping and Reporting Requirements	21
SUMMARY PAGE FOR BUILDING 4707 NATURAL GAS BOILER	22
PROVISOS FOR BUILDING 4707 NATURAL GAS BOILER (16.738 MME	TU/HR) 23
Applicability	23
Emission Standards	23
Compliance and Performance Test Methods and Procedures	23
Emission Monitoring	23
Recordkeeping and Reporting Requirements	23
SUMMARY PAGE FOR FUEL OIL BOILERS (APPENDIX C)	24
PROVISOS FOR FUEL OIL BOILERS (APPENDIX C)	25
Applicability	25
Emission Standards	25

Compliance and Performance Test Methods and Procedures	25
Emission Monitoring	26
Recordkeeping and Reporting Requirements	27
SUMMARY PAGE FOR EMERGENCY DIESEL GENERATORS (APPENDIX I)) 28
PROVISOS FOR EMERGENCY DIESEL GENERATORS (APPENDIX D)	29
Applicability	29
Emission Standards	29
Compliance and Performance Test Methods and Procedures	30
Emission Monitoring	30
Recordkeeping and Reporting Requirements	30
SUMMARY PAGE FOR DIESEL ENGINES (WATER PUMPS)	31
PROVISOS FOR DIESEL ENGINES (WATER PUMPS)	32
Applicability	32
Emission Standards	32
Compliance and Performance Test Methods and Procedures	32
Emission Monitoring	32
Recordkeeping and Reporting Requirements	33
SUMMARY PAGE FOR SURFACE COATING	34
PROVISOS FOR SURFACE COATING	35
Applicability	35
Emission Standards	35
Compliance and Performance Test Methods and Procedures	35
Emission Monitoring	35
Recordkeeping and Reporting Requirements	36
SUMMARY PAGE FOR CLEANING OPERATIONS	39
PROVISOS FOR CLEANING OPERATIONS	40
Applicability	40

Emission Standards	40
Compliance and Performance Test Methods and Procedures	40
Emission Monitoring	40
Recordkeeping and Reporting Requirements	40
SUMMARY PAGE FOR BULK PLANT	41
PROVISOS FOR BULK PLANT	42
Applicability	42
Emission Standards	42
Compliance and Performance Test Methods and Procedures	44
Emission Monitoring	44
Recordkeeping and Reporting Requirements	44
SUMMARY PAGE FOR PROPULSION ENGINE & LAUNCH VEHICLE SYSTEM T PROVISOS FOR PROPULSION ENGINE & LAUNCH VEHICLE SYSTEM TESTIN	
Applicability	
Emission Standards	
Compliance and Performance Test Methods and Procedures	46
Emission Monitoring	46
Recordkeeping and Reporting Requirements	46
SUMMARY PAGE FOR AIR STRIPPER	47
PROVISOS FOR AIR STRIPPER	48
Applicability	48
Emission Standards	48
Compliance and Performance Test Methods and Procedures	48
Emission Monitoring	48
Recordkeeping and Reporting Requirements	48
SUMMARY PAGE FOR SAND BLASTING	49
PROVISOS FOR SAND BLASTING	50

ADDENDIY D - EMEDGENCY DIESEL GENEDATORS	56
APPENDIX C - FUEL OIL BOILERS	55
APPENDIX B - SMALL FUEL OIL BOILERS	54
APPENDIX A - SMALL NATURAL GAS BOILERS	53
Recordkeeping and Reporting Requirements	52
Emission Monitoring	52
Compliance and Performance Test Methods and Procedure	
Emission Standards	52
Applicability	52
PROVISOS FOR GRIT BLASTER	, 4000 NORTH
SUMMARY PAGE FOR GRIT BLASTER	51
Recordkeeping and Reporting Requirements	50
Emission Monitoring	50
Compliance and Performance Test Methods and Procedure	es 50
Emission Standards	50
Applicability	50

Fede	erally Enforceable Provisos	eneral Fermit Flovisos	Regulations
1.	Transfer		
	or otherwise, either from o piece of equipment to anot	able, whether by operation of law one location to another, from one ther, or from one person to d in Rule 335-3-1613(1)(a)5.	Rule 335-3-1602(6)
2.	Renewals		
		renewal shall be submitted at least ore than eighteen (18) months, on of this permit.	Rule 335-3-1612(2)
	to operate upon the expira and complete renewal appl	permit is issued shall lose its right tion of this permit unless a timely lication has been submitted s listed in the previous paragraph.	
3.	Severability Clause		
	The provisions of this permand if any section, paragraclause, or phrase of this perinvalid or unconstitutional jurisdiction, the judgment invalidate the remainder of confined in its operation to subparagraph, subdivision that shall be directly involved such judgment shall have	Rule 335-3-1605(e)	
4.	Compliance	V	
	ADEM Admin. Code permit will constitut of 1990 and ADEM result in an enforced limited to, permit te	comply with all conditions of 335-3. Noncompliance with this te a violation of the Clean Air Act Admin. Code 335-3 and may ment action; including but not rmination, revocation and fication; or denial of a permit by the permittee.	Rule 335-3-1605(f)
	enforcement action	not use as a defense in an that maintaining compliance with ermit would have required halting mitted activity.	Rule 335-3-1605(g)

Fed	erally Enforceable Provisos	Regulations
5.	Termination for Cause	
	This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any	Rule 335-3-1605(h)
	permit condition.	
6.	Property Rights	
	The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.	Rule 335-3-1605(i)
7.	Submission of Information	
	The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.	Rule 335-3-1605(j)
8.	Economic Incentives, Marketable Permits, and Emissions Trading	
	No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.	Rule 335-3-1605(k)
9.	Certification of Truth, Accuracy, and Completeness:	
	Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.	Rule 335-3-1607(a)
10.	Inspection and Entry	
	Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of	Rule 335-3-1607(b)

Fede	rally l	Enforc	Regulations	
		vironmental Management and EPA to conduct the owing:		
	(a)	is loc or w	r upon the permittee's premises where a source cated or emissions-related activity is conducted, here records must be kept pursuant to the litions of this permit;	
	(b)		ew and/or copy, at reasonable times, any records must be kept pursuant to the conditions of this nit;	
	(c)	(inclucion)	ect, at reasonable times, this facility's equipment uding monitoring equipment and air pollution rol equipment), practices, or operations regulated quired pursuant to this permit;	
	(d)	or pa	ple or monitor, at reasonable times, substances arameters for the purpose of assuring compliance this permit or other applicable requirements.	
11.	Compliance Provisions			
	(a)	appl	permittee shall continue to comply with the icable requirements with which the company has fied that it is already in compliance.	Rule 335-3-1607(c)
	(b)	appl	permittee shall comply in a timely manner with icable requirements that become effective during erm of this permit.	
12.	Com	plianc	e Certification	
		₹ISSESSESSES.	ce certification shall be submitted annually by of each year.	Rule 335-3-1607(e)
	(a)		compliance certification shall include the wing:	
		(1)	The identification of each term or condition of this permit that is the basis of the certification;	
		(2)	The compliance status;	
		(3)	The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-1605(c) (Monitoring and Recordkeeping	

Fede	rally E	Regulations		
			Requirements);	
		(4)	Whether compliance has been continuous or intermittent;	
		(5)	Such other facts as the Department may require to determine the compliance status of the source;	
	(b)	The o	compliance certification shall be submitted to:	
	Alab	ama D	Pepartment of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463 and to:	
			e and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303	
13.	Reop	ening	for Cause	
		•	of the following circumstances, this permit will be rior to the expiration of the permit:	Rule 335-3-1613(5)
	(a)	Air A with years than appli	tional applicable requirements under the Clean et of 1990 become applicable to the permittee a remaining permit term of three (3) or more s. Such a reopening shall be completed not later eighteen (18) months after promulgation of the cable requirement. No such reopening is ired if the effective date of the requirement is than the date on which this permit is due to be.	
	(b)	requisoure by th	tional requirements (including excess emissions irements) become applicable to an affected ce under the acid rain program. Upon approval the Administrator, excess emissions offset plans be deemed to be incorporated into this permit.	
	(c)	conta state	Department or EPA determines that this permit ains a material mistake or that inaccurate ments were made in establishing the emissions dards or other terms or conditions of this permit.	

Fede	rally E	nforce	Regulations	
	(d)	this p	administrator or the Department determines that permit must be revised or revoked to assure liance with the applicable requirements.	
14.	Addit	tional	Rules and Regulations	
	existi Rules	ng on t s and R	is issued on the basis of Rules and Regulations the date of issuance. In the event additional Regulations are adopted, it shall be the permit ponsibility to comply with such rules.	§22-28-16(d), Code of Alabama 1975, as amended
15.	<u>Equi</u> j	pment	Maintenance or Breakdown	
	(a)	equip issue main equip twent shutc the sl	e case of shutdown of air pollution control oment (which operates pursuant to any permit d by the Director) for necessary scheduled tenance, the intent to shut down such oment shall be reported to the Director at least cy-four (24) hours prior to the planned down, unless such shutdown is accompanied by hutdown of the source which such equipment is ded to control. Such prior notice shall include, is not limited to the following:	Rule 335-3-107(1), (2)
		(1)	Identification of the specific facility to be taken out of service as well as its location and permit number;	
		(2)	The expected length of time that the air pollution control equipment will be out of service;	
		(3)	The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;	
		(4)	Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;	
		(5)	The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.	
	(b)	or up is exp conta	e event that there is a breakdown of equipment set of process in such a manner as to cause, or bected to cause, increased emissions of air aminants which are above an applicable lard, the person responsible for such equipment	

		General Permit Provisos	
Fede	rally Enforce	eable Provisos	Regulations
	work pertii the b	notify the Director within 24 hours or the next ing day and provide a statement giving all nent facts, including the estimated duration of reakdown. The Director shall be notified when reakdown has been corrected.	
16.	Operation (of Capture and Control Devices	
	which this properated at emissions of the above ed	tion control devices and capture systems for permit is issued shall be maintained and all times in a manner so as to minimize the f air contaminants. Procedures for ensuring that quipment is properly operated and maintained so lize the emission of air contaminants shall be	§22-28-16(d), Code of Alabama 1975, as amended
17.	Obnoxious	<u>Odors</u>	
18.	obnoxious of verified by A odorous em the Alabama	is issued with the condition that, should odors arising from the plant operations be air Division inspectors, measures to abate the issions shall be taken upon a determination by a Department of Environmental Management measures are technically and economically	Rule 335-3-108
	eman	nutions shall be taken to prevent fugitive dust nating from plant roads, grounds, stockpiles, ons, dryers, hoppers, ductwork, etc.	Rule 335-3-402
	in the airbo follov	or haul roads and grounds will be maintained e following manner so that dust will not become rne. A minimum of one, or a combination, of the ving methods shall be utilized to minimize rne dust from plant or haul roads and grounds:	
	(1)	By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;	
	(2)	By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;	
	(3)	By paving;	

Fede	rally E	inforceable Provisos	Regulations
		(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;	
	adeq and a exclu conti Alter	Ild one, or a combination, of the above methods fail to uately reduce airborne dust from plant or haul roads grounds, alternative methods shall be employed, either sively or in combination with one or all of the above rol techniques, so that dust will not become airborne. native methods shall be approved by the Department to utilization.	
19.	<u>Addi</u>	tions and Revisions	
	•	modifications to this source shall comply with the fication procedures in Rules 335-3-1613 or 335-3-16-	Rule 335-3-1613 and .14
20.	Reco	rdkeeping Requirements	
	(a)	Records of required monitoring information of the source shall include the following:	Rule 335-3-1605(c)2.
		(1) The date, place, and time of all sampling or measurements;	
		(2) The date analyses were performed;	
		(3) The company or entity that performed the analyses;	
		(4) The analytical techniques or methods used;	
		(5) The results of all analyses; and	
		(6) The operating conditions that existed at the time of sampling or measurement.	
	(b)	Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit	
21.	Repo	orting Requirements	

General Permit Provisos					
Fede	rally I	Enforceable Provisos	Regulations		
	(a)	Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-1604(9).	Rule 335-3-1605(c)3.		
	(b)	Deviations from permit requirements shall be reported within 48 hours or 2 working day of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.			
22.	<u>Emi</u>	ssion Testing Requirements			
	provisafet acco 40 o	a point of emission which requires testing will be ided with sampling ports, ladders, platforms, and other by equipment to facilitate testing performed in rdance with procedures established by Part 60 of Title of the Code of Federal Regulations, as the same may be ended or revised.	Rule 335-3-105(3) and Rule 335-3-1- .04(1)		
	in ac	Air Division must be notified in writing at least 10 days dvance of all emission tests to be conducted and nitted as proof of compliance with the Department's air ation control rules and regulations.			
	proc	void problems concerning testing methods and edures, the following shall be included with the ication letter:			
	(1)	The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.	Rule 335-3-104		
	(2)	A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).			
	(3)	A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated			

Fede	rally Enforceable Provisos	Regulations
	capacity.	
	(4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.	
	A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by- case basis.	Rule 335-3-104
	All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.	
23.	Payment of Emission Fees	
	Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-704.	Rule 335-1-704
24.	Other Reporting and Testing Requirements	
	Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.	Rule 335-3-104(1)
25.	Title VI Requirements (Refrigerants)	
	Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.	40 CFR Part 82
	No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.	
	The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.	
		I

Fede	rally	Enforce	Regulations	
26.	Che	mical A	Accidental Prevention Provisions	
	pres	ent in a	al listed in Table 1 of 40 CFR Part 68.130 is a process in quantities greater than the threshold ted in Table 1, then:	40 CFR Part 68
	(a)	(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.		
	(b)	The o	owner or operator shall submit one of the wing:	
		(1)	A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or,	
		(2)	A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.	
27.	Disp	lay of	Permit	
	at th loca	ne site v ted and	t shall be kept under file or on display at all times where the facility for which the permit is issued is I will be made readily available for inspection by tersons who may request to see it.	Rule 335-3-1401(1)(d)
28.	Circ	umven	<u>ation</u>	
	any redu cond	device action in ceals or	shall cause or permit the installation or use of or any means which, without resulting in in the total amount of air contaminant emitted, dilutes any emission of air contaminant which rwise violate the Division 3 rules and regulations.	Rule 335-3-110
29.	<u>Visi</u>	ble Em	issions	
	this disc than sour emis	permit, harge no 20% in 20% in ce discussions garage	erwise specified in the Unit Specific provisos of any source of particulate emissions shall not more than one 6-minute average opacity greater in any 60-minute period. At no time shall any charge a 6-minute average opacity of particulate greater than 40%. Opacity will be determined by it 60, Appendix A, Method 9, unless otherwise in the Unit Specific provisos of this permit.	Rule 335-3-401(1)
30.	Fue	l-Burni	ng Equipment	
				1

Fede	rally :	Enforceable Provisos	Regulations
	(a)	Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Rule 335-3-403.	Rule 335-3-403
21	(b)	Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Rule 335-3-501.	Rule 335-3-501
31.	Proc	cess Industries – General	
	this	ess otherwise specified in the Unit Specific provisos of permit, no process may discharge particulate emissions access of the emissions specified in Rule 335-3-404.	Rule 335-3-404
32.	<u>Ave</u>	raging Time for Emission Limits	
	for t	ess otherwise specified in the permit, the averaging time he emission limits listed in this permit shall be the inal time required by the specific test method.	Rule 335-3-105

Summary Page for Small Natural Gas Boilers (Appendix A)

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
See Appendix A	Small Natural Gas Boilers	PM	E = 1.38(H) ^{-0.44}	Rule 335-3-403
See Appendix A	Small Natural Gas Boilers	NOx	N/A	N/A
See Appendix A	Small Natural Gas Boilers	СО	N/A	N/A
See Appendix A	Small Natural Gas Boilers	VOC	N/A	N/A
See Appendix A	Small Natural Gas Boilers	SO ₂	Natural Gas Only	Rule 335-3-1404
See Appendix A	Small Natural Gas Boilers	Opacity	See General Proviso 29	Rule 335-3-401(1)

Provisos for Small Natural Gas Boilers (Appendix A)

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
Emission Standards	
1. These boilers shall burn natural gas only with the exception of Boilers 4209-01 and 4209-02 (which burns LP gas).	Rule 335-3-1404
Compliance and Performance Test Methods and Procedures	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
Emission Monitoring	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
Recordkeeping and Reporting Requirements	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A

Summary Page for Small Fuel Oil Boilers (Appendix B)

Permitted Operating

Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
See Appendix B	Small Fuel Oil Boilers	PM	E = 1.38(H)-0.44	Rule 335-3-403
See Appendix B	Small Fuel Oil Boilers	NOx	N/A	N/A
See Appendix B	Small Fuel Oil Boilers	СО	N/A	N/A
See Appendix B	Small Fuel Oil Boilers	VOC	N/A	N/A
See Appendix B	Small Fuel Oil Boilers	SO ₂	0.5% sulfur content	Rule 335-3-1404
See Appendix B	Small Fuel Oil Boilers	Opacity	See General Proviso 29	Rule 335-3-401(1)

Provisos for Small Fuel Oil Boilers (Appendix B)

Fe	ederally Enforceable Provisos	Regulations
Ap	pplicability	
1.	These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2.	These sources have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-1404 "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]".	Rule 335-3-1404
En	nission Standards	
1.	These units shall burn natural gas and No. 2 fuel oil only. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight.	Rule 335-3-1404
Co	ompliance and Performance Test Methods and Procedures	
1.	The sulfur content of the fuel oil delivered to these boilers shall be measured in accordance with ASTM D129-64 or an alternative method approved by the Department.	Rule 335-3-105
2.	Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-105
3.	Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-105
En	nission Monitoring	
1.	To ensure that compliance with the fuel oil sulfur content limit is maintained, the Permittee shall either:	Rule 335-3-14-04
	(a) obtain a certification from the fuel supplier consisting of the name of the oil supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil, or	
	(b) collect oil samples from the fuel tank for each boiler immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with procedures found in ASTM D 129-64. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel	

Fe	derally Enforceable Provisos	Regulations
	in the tank will be required upon filling. Results of the fuel analysis taken after each new oil shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average of fuel oil sulfur content until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.	
2.	The flame appearance shall be monitored daily to ensure that the proper combustion parameters are maintained in these boilers.	Rule 335-3-1605(c)
3.	The boiler efficiency shall be monitored to ensure that the proper combustion parameters are maintained in the boilers based on the type and amount of fuel being burned in the boilers.	Rule 335-3-1605(c)
4.	Periodic inspections of these boilers shall be performed. The inspections include inspections of tubes, burners, and control valves to ensure the boilers operates as designed.	Rule 335-3-1605(c)
5.	Portable Boiler 2, Portable Boiler 3, and Portable Boiler 4 have no additional requirements other than those in the General Provisos.	N/A
Re	cordkeeping and Reporting Requirements	
1.	Records of the fuel oil supplier certifications and any results of fuel oil sulfur content testing shall be maintained for a period of no less than five years following the date of generation	Rule 335-3-1404
2.	Daily records of flame appearance checks and monthly calculations of the boiler efficiency shall be maintained. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)
3.	Records of boiler inspections and maintenance performed shall be kept in a form suitable for inspection. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)
4.	Portable Boiler 2, Portable Boiler 3, and Portable Boiler 4 have no additional requirements other than those in the General Provisos.	N/A

Summary Page for Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4707-E5-01	Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	PM	E = 1.38(H)-0.44	Rule 335-3-403
4707-E5-01	A Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	NOx	N/A	N/A
4707-E5-01	Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	СО	N/A	N/A
4707-E5-01	Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	VOC	N/A	N/A
4707-E5-01	Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	SO_2	Natural Gas Only	Rule 335-3-1404
4707-E5-01	Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)	Opacity	See General Proviso 29	Rule 335-3-401(1)

Provisos for Building 4707 Natural Gas Boiler (16.738 MMBtu/hr)

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
Emission Standards	
1. This unit shall burn only natural gas.	Rule 335-3-1404
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-105
2. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-105
Emission Monitoring	
1. The flame appearance shall be monitored daily to ensure that the proper combustion parameters are maintained in these boilers.	Rule 335-3-1605(c)(1)
2. The boiler efficiency shall be monitored to ensure that the proper combustion parameters are maintained in these boilers based on the type and amount of fuel being burned in the boiler.	Rule 335-3-1605(c)(1)
3. Periodic inspections of the boiler shall be performed to include inspections of tubes, burners, and control valves to ensure that the boiler operate as designed.	Rule 335-3-1605(c)(1)
Recordkeeping and Reporting Requirements	
1. Daily records of flame appearance checks and monthly calculations of the boiler efficiency shall be maintained. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)(2)
2. Records of boiler inspections and maintenance performed shall be kept in a form suitable for inspection. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)(2)

Summary Page for Fuel Oil Boilers (Appendix C)

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
See Appendix C	Appendix C Fuel Oil Boilers	PM	E = 1.38(H)-0.44	Rule 335-3-403
See Appendix C	Appendix C Fuel Oil Boilers	NOx	N/A	N/A
See Appendix C	Appendix C Fuel Oil Boilers	СО	N/A	N/A
See Appendix C	Appendix C Fuel Oil Boilers	VOC	N/A	N/A
See Appendix C	Appendix C Fuel Oil Boilers	SO ₂	0.5% sulfur content	Rule 335-3-1404
See Appendix C	Appendix C Fuel Oil Boilers	Opacity	See General Proviso 29	Rule 335-3-401(1)
4567-BR-03	Building 4567 – 12.555 MMBtu/hr	PM	0.45 lb/hr	Rule 335-3-1404
4567-BR-03	Building 4567 – 12.555 MMBtu/hr	NOx	2.16 lbs/hr	Rule 335-3-1404
4567-BR-03	Building 4567 – 12.555 MMBtu/hr	СО	0.45 lbs/hr	Rule 335-3-1404
4567-BR-03	Building 4567 – 12.555 MMBtu/hr	VOC	0.18 lbs/hr	Rule 335-3-1404

Provisos for Fuel Oil Boilers (Appendix C)

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2. Boiler 4567-BR-03 is subject to the applicable requirements of the Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units found in Subpart Dc of 40 CFR Part 60.	RULE 335-3-1002(1)(C) & 40 CFR PART 60 SUBPART DC
3. Boiler 4567-BR-03 has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-1404 "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]".	Rule 335-3-1404
Emission Standards	
1. These units shall burn natural gas and No. 2 fuel oil only. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight.	Rule 335-3-1404
2. Emissions of Particulate Matter from Boiler 4567-BR-03 shall not exceed 0.45 lb/hr	Rule 335-3-1404
3. Emissions of Nitrogen Oxides from Boiler 4567-BR-03 shall not exceed 2.16 lbs/hr	Rule 335-3-1404
4. Emissions of Carbon Monoxide from Boiler 4567-BR-03 shall not exceed 0.45 lbs/hr	Rule 335-3-1404
5. Emissions of Volatile Organic Compounds from Boiler 4567-BR-03 shall not exceed 0.18 lbs/hr	Rule 335-3-1404
Compliance and Performance Test Methods and Procedures	
1. The sulfur content of the fuel oil delivered to these boilers shall be measured in accordance with ASTM D129-64 or an alternative method approved by the Department.	Rule 335-3-105
2. Method 5 of 40 CFR Part 60, Appendix A shall be used in the determination of particulate emissions from the stack.	Rule 335-3-105

Federally Enforceable Provisos	Regulations
3. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-105
Emission Monitoring	
 To ensure thatcompliance with the fuel oil sulfur content limit is maintained, the Permittee shall either: (a) obtain a certification from the fuel supplier consisting of the name of the oil supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil, or (b) collect oil samples from the fuel tank for each boiler immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with procedures found in ASTM D 129-64. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank will be required upon filling. Results of the fuel analysis taken after each new oil shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average of fuel oil sulfur content until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause 	Rule 335-3-14-04
the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.	
2. The flame appearance shall be monitored daily to ensure that the proper combustion parameters are maintained in these boilers.	Rule 335-3-1605(c)
3. The boiler efficiency shall be monitored to ensure that the proper combustion parameters are maintained in the boilers based on the type and amount of fuel being burned in the boilers.	Rule 335-3-1605(c)
4. Periodic inspections of these boilers shall be performed. The inspections include inspections of tubes, burners, and control valves to ensure the boilers operates as designed.	Rule 335-3-1605(c)

Fe	ederally Enforceable Provisos	Regulations
Re	cordkeeping and Reporting Requirements	
1.	Records of the fuel oil supplier certifications and any results of fuel oil sulfur content testing shall be maintained for a period of no less than five years following the date of generation	Rule 335-3-1404
2.	Daily records of the flame appearance checks and the monthly calculations of the boiler efficiency shall be maintained. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)
3.	Records of the boiler inspections and maintenance performed shall be kept in a form suitable for inspection. These records shall be retained for at least five years following the date of generation and shall be made available upon request.	Rule 335-3-1605(c)
4.	Records of the fuel combusted in Boiler 4567-BR-03 during each calendar month must be kept in a permanent form suitable for inspection. The records shall be retained for at least five (5) years from the date of generation and available upon request.	§60.48c(g) (NSPS)

Summary Page for Emergency Diesel Generators (Appendix D)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
See Appendix D	Emergency Diesel Generators	PM	N/A	N/A
See Appendix D	Emergency Diesel Generators	NO _x	N/A	N/A
See Appendix D	Emergency Diesel Generators	СО	N/A	N/A
See Appendix D	Emergency Diesel Generators	VOC	N/A	N/A
See Appendix D	Emergency Diesel Generators	SO ₂	N/A	N/A
See Appendix D	Emergency Diesel Generators	Opacity	(See General Proviso 29)	335-3-401(1) SIP

Provisos for Emergency Diesel Generators (Appendix D)

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	RULE 335-3-1603
2. These sources are subject to the applicable requirements of Subpart A of 40 CFR Part 60, "General Provisions".	40 CFR Part 60 Subpart A and IIII.
3. These units are subject to the applicable requirements of 40 CFR Part 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines". Emission Standards	40 CFR Part 60 Subpart
1. These units must be certified according to 40 CFR 60 Subpart IIII for the same model year and maximum engine power.	40 CFR 60.4205
2. These units must be installed and configured according to the manufacturer's specifications.	40 CFR 60.4211(c)
3. The permittee must install a non-resettable hour meter prior to startup of engines.	40 CFR 60.4209(a)
4. These units must use diesel fuel that meets the requirements of 40 CFR 80.510(a).	40 CFR 60.4207(a)
5. Beginning October 1, 2010, these units must use diesel fuel that meets the requirements of 40 CFR 80.510(b).	40 CFR 60.4207(b)
6. The facility must operate and maintain these units according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.	40 CFR 60.4206

Federally Enforceable Provisos	Regulations
7. Any operation of these units, other than emergency operation, maintenance, and testing is prohibited. Maintenance checks and readiness testing is limited to 100 hours per year.	40 CFR 60.4211(e)
Compliance and Performance Test Methods and Procedures	
1. Method 9 of 40 CFR Part 60, Appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-105
Emission Monitoring	
1. These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
Recordkeeping and Reporting Requirements	
1. These sources are subject to no additional specific recordkeeping and reporting requirements other than those listed in the General Permit Provisos.	N/A

Summary Page for Diesel Engines (Water Pumps)

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
Bldg 4567 - 1, 2, 3, 4, & 5	Building 4567 - 5 Engines (872 hp)	PM	N/A	N/A
Bldg 4567 - 1, 2, 3, 4, & 5	Building 4567 - 5 Engines (872 hp)	NOx	N/A	N/A
Bldg 4567 - 1,2, 3,4, & 5	Building 4567 - 5 Engines (872 hp)	SO ₂	N/A	N/A
Bldg 4567 - 1, 2, 3, 4, & 5	Building 4567 - 5 Engines (872 hp)	СО	N/A	N/A
Bldg 4567 - 1, 2, 3, 4, & 5	Building 4567 - 5 Engines (872 hp)	VOC	N/A	N/A
Bldg 4567 - 1, 2, 3, 4, & 5	Building 4567 - 5 Engines (872 hp)	Opacity	See General Proviso 29	Rule 335-3-401(1)
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	PM	N/A	N/A
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	NOx	3.2 lb/MMBtu 163,741 gallons of diesel fuel	Rule 335-3-1404
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	SO ₂	0.5% sulfur content	Rule 335-3-1404
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	СО	N/A	N/A
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	VOC	N/A	N/A
Bldg 4567 - 8 & 9	Building 4567 – 2 Engines (1355 hp)	Opacity	See General Proviso 29	Rule 335-3-401(1)
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	PM	N/A	N/A
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	NOx	N/A	N/A
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	SO ₂	N/A	N/A
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	СО	N/A	N/A
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	VOC	N/A	N/A
Bldg 4667 1 - 13	Building 4667 -13 Engines (2577 hp)	Opacity	See General Proviso 29	Rule 335-3-401(1)

Provisos for Diesel Engines (Water Pumps)

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2. Unit Nos. 4567-08 and 09 have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-1404 "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]".	RULE 335-3-1404
3. These sources are subject to the applicable requirements of Subpart ZZZZ of 40 CFR Part 63. Since these engines are existing compression ignition, they do not have to meet the requirements of Subpart ZZZZ and Subpart A.	40 CFR Part 63 Subpart ZZZZ
Emission Standards	
1. Unit Nos. 4567-08 and 09 shall burn No. 2 Fuel Oil only. The sulfur content of the No. 2 Fuel Oil shall not exceed 0.5% by weight.	Rule 335-3-1404
2. Emissions of Nitrogen Oxides from Unit Nos. 4567-08 and 09 shall not exceed 3.2 lb/MMBtu.	Rule 335-3-1404
3. Unit Nos. 4567-08 and 09 shall burn no more than a total of 163,741 gallons of diesel fuel in any consecutive twelve month period.	Rule 335-3-1404
Compliance and Performance Test Methods and Procedures	
1. The sulfur content of the fuel oil delivered to the engines shall be measured in accordance with ASTM D129-64 or an alternative method approved by the Department.	Rule 335-3-105
2. Method 7E of 40 CFR Part 60, Appendix A shall be used in the determination of nitrogen oxide emissions fromt the stack.	Rule 335-3-105
Emission Monitoring	
1. These sources are subject to no additional specific monitoring requirements other than those listed in the General Permit Provisos.	N/A

Recordkeeping and Reporting Requirements 1. Records of the sulfur content of the fuel oil used in Unit Nos. 4567-08 and 09 must be kept in a form suitable for inspection. Fuel supplier certifications may be used as records for fuel oil sulfur content. These records shall be retained for at least five years following the date of generation and shall be made available upon request. 2. Records of rolling 12-month total fuel oil consumption for Unit Nos. 4567-08 and 09 must be kept in a form suitable for inspection. These records shall be retained at least five years

following the date of generation and shall be made available

upon request.

Summary Page for Surface Coating

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4471-191-01	Coating of Spacecraft models and beams	PM	$E = 3.59(P)^{0.62}$	Rule 335-3-404
4471-191-01	Coating of Spacecraft models and beams	VOC	N/A	N/A
4471-191-01	Coating of Spacecraft models and beams	HAPs	N/A	N/A
4612-1111-01	Surface Coating of Metal Test Panels	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4612-1111-01	Surface Coating of Metal Test Panels	VOC	N/A	N/A
4612-1111-01	Surface Coating of Metal Test Panels	HAPs	N/A	N/A
4650-PB-01	Maintenance Painting	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4650-PB-01	Maintenance Painting	VOC	N/A	N/A
4650-PB-01	Maintenance Painting	HAPs	N/A	N/A
4707-130-01	Surface Coating of Test Panels	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4707-130-01	Surface Coating of Test Panels	VOC	N/A	N/A
4707-130-01	Surface Coating of Test Panels	HAPs	N/A	N/A
4707-SOFI	Foam Insulation Application	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4707-SOFI	Foam Insulation Application	VOC	N/A	N/A
4707-SOFI	Foam Insulation Application	HAPs	N/A	N/A
4739-SOFI	Surface Coating of Foam Insulation	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4739-SOFI	Surface Coating of Foam Insulation	VOC	N/A	N/A
4739-SOFI	Surface Coating of Foam Insulation	HAPs	N/A	N/A
4760-PAINT	Coating of Space Vehicles Parts	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4760-PAINT	Coating of Space Vehicles Parts	VOC	N/A	N/A
4760-PAINT	Coating of Space Vehicles Parts	HAPs	N/A	N/A
4765-X014	Thermal Protection System Development	PM	E = 3.59(P) ^{0.62}	Rule 335-3-404
4765-X014	Thermal Protection System Development	VOC	39.0 TPY	Rule 335-3-1404
4765-X014	Thermal Protection System Development	HAPs	9.5 TPY – Single HAP	Rule 335-3-1406
			23.5 TPY Combination	

Provisos for Surface Coating

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2. This source (4765-X014) has enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code R. 335-3-1404 "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]".	RULE 335-3-1404
Emission Standards	
1. Emissions of Volatile Organic Compounds (VOCs) from all operations at the Building 4765 Paint Booth (4765-X014) including but not limited to surface coating, storage, cleanup, etc., shall not exceed 39.0 tons in any consecutive rolling 12-month period, based on the premise that all VOCs applied are emitted.	Rule 335-3-1404
2. Emissions of Hazardous Air Pollutants (HAPs) from all operations at the Building 4765 Paint Booth (4765-X014) including but not limited to surface coating, storage, cleanup, etc., shall not exceed 9.5 tons of any single HAPs or 23.5 tons of any combination of HAPs in any consecutive rolling 12-month period, based on the premise that all HAPs applied are emitted	
Compliance and Performance Test Methods and Procedures	
1. Method 5 of 40 CFR (Latest Edition) Part 60, Appendix A shall be used in the determination of particulate matter emissions.	Rule 335
2. Method 24 of 40 CFR Part 60, Appendix A shall be used in the determination of volatile organic compound emissions.	Rule 335
3. Method 311 of 40 CFR Part 63, Appendix A shall be used in the determination of volatile hazardous air pollutant emissions	Rule 335
Emission Monitoring	
1. The filters(s) associated with these sources shall be inspected on at least an annual basis to ensure maintenance is performed in such a manner as to minimize the emission of particulate matter.	Rule 335-3-1605(c)

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	



Federally Enforceable Provisos

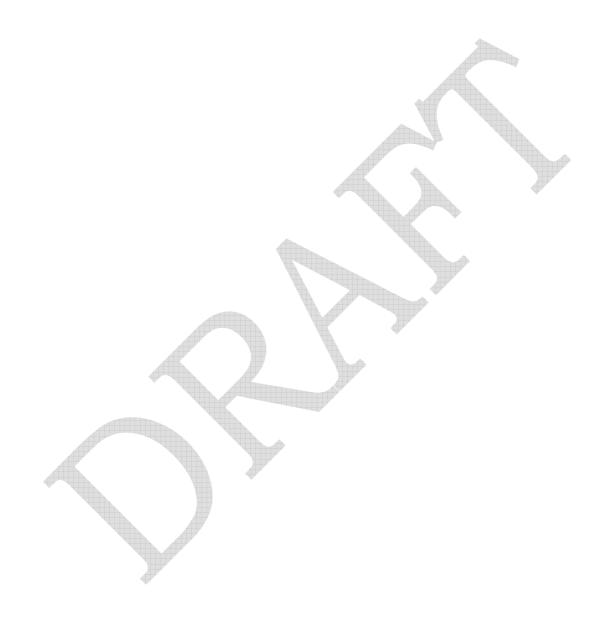
Regulations

1. Accurate and understandable records, concerning VOC and HAP emissions from the Building 4765 Paint Booth (4765-X014) shall be kept in a form suitable for inspection for at least 5 years following the date of the record. These records will be made available immediately upon request and will contain the following information:

Rule 335-3-16-.05(c)

- (a) The type, quantity in gallons, and weight in lbs, of each VOC and HAP containing materials used each calendar month.
- (b) The VOC content by weight (in pounds per gallon) of each VOC containing materials used shall be determined either by using EPA Test Method 24, as defined in 40 CFR 60, Appendix A, or equivalent vendor data approved by the Department in advance. The VOC content of coatings may be determined by test method on a random basis to verify formulation data and such other times as the Department may request.
- (c) The HAP content by weight (in pounds per gallon) of each coating used shall be determined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A, or equivalent vendor data approved by the Department in advance.
- (d) The percent by volume and percent by weight of VOCs, HAPs, solids, water, and content of each VOC and HAP containing materials used each calendar month.
- (e) Complete inventories of HAP and VOC containing materials (their usage and HAP and VOC content) shall be made at the end of each calendar month. Compliance with HAP and VOC limits shall be based upon these monthly materials use inventories and the use and control efficiency of the particulate filters. Emissions calculations and records will also incorporate the use and control efficiency of the particulate filters.
- (f) The amount of VOCs and HAPs emitted each calendar month expressed in the units of pounds and tons.
- (g) The rolling 12-month total of VOCs and HAPs emitted in the units of pounds and tons.

Federally Enforceable Provisos	Regulations
2. Records of the required filter inspections, along with records of any maintenance performed on the filter(s) shall be kept in a form suitable for inspection for at least fire years following the date of generation of the record.	, ,



Summary Page for Cleaning Operations

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4711-179A-01	Batch Vapor Degreaser	VOC	N/A	N/A
035	Hand Wipe Cleaning	HAPs	N/A	N/A
035	Hand Wipe Cleaning	VOC	N/A	N/A
PC-Fugitive	Pipe Cleaning	VOCs	N/A	N/A
PC-Fugitive	Pipe Cleaning	HAPs	N/A	N/A

Provisos for Cleaning Operations

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
Emission Standards	
1. These sources are not subject to any standards other than the applicable standards contained in the general provisos.	N/A
Compliance and Performance Test Methods and Procedures	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Emission Monitoring	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Recordkeeping and Reporting Requirements	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A

Summary Page for Bulk Plant

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4611 (1)	20,000 Gallon Gasoline Storage Tank	VOCs	Vapor Recovery	Rule 335-3-6

Provisos for Bulk Plant

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-605, "Bulk Gasoline Plants."	Rule 335-3-605
Emission Standards	
1. This bulk gasoline plant shall not have an average daily throughput greater than 20,000 gallons in any calendar month.	Rule 335-3-605 (1)(b)
2. The Permittee shall not permit the unloading of gasoline into stationary storage tanks unless each tank is equipped with a vapor balance system as described under paragraph (6) of ADEM Admin. Code R. 335-3-605 and:	Rule 335-3-605 (3)
(a) Each tank is equipped with a submerged fill pipe, approved by the Director; or.	
(b) Each tank is equipped with a fill line whose discharge opening is not over 18 inches from the bottom of the tank	
3. The permittee shall not allow the unloading of tank trucks or trailers at this bulk gasoline plant unless each tank truck or trailer is equipped with a vapor balance system as described under paragraph (6) of ADEM Admin. Code R. 335-3-605 and complies with ADEM Admin. Code R. 335-3-620(3).	Rule 335-3-605 (4)

Federally Enforceable Provisos

Regulations

4. The permittee shall not allow the transfer of gasoline between a tank truck or trailer and a stationary storage tank unless:

Rule 335-3-6-.05 (5)

- (a) The transfer is conducted in accordance with paragraphs 3 and 4 of ADEM Admin. Code R. 335-3-6-.05.
- (b) The vapor balance system is in good working order and is connected and operating; and
- (c) Gasoline tank truck or trailer hatches are covered at all times during unloading operations; and
- (d) There are no leaks in the tank trucks' and trailers' pressure/vacuum relief valves and hatch covers, or the truck tanks or storage tanks, or associated vapor and liquid lines during unloading; and
- (e) The pressure relief valves on above-ground storage vessels and tank trucks or trailers are set to release at no less than 0.7 psia or the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines); and
- (f) The gasoline tank truck or trailer has a valid Department Air Sticker or Jefferson County Department of Health Air Sticker as required by ADEM Admin. Code 335-3-6-.20(4) attached and visibly displayed

Federally Enforceable Provisos	Regulations
 5. The permittee shall not permit the loading of gasoline from the bulk gasoline plant into tank trucks or trailers that are returning with vapors from gasoline dispensing facilities equipped with Stage I vapor recovery systems unless each tank truck or trailer and the stationary storage tank is equipped with a vapor balance system as described under paragraph (6) of ADEM Admin. Code R. 335-3-605 and complies with paragraph (3) of ADEM Admin. Code R. 335-3-620 and: (a) Equipment is available at the bulk gasoline plant to provide for the submerged filling of each tank truck or trailer; or (b) Each tank truck or trailer is equipped for bottom filling. 	Rule 335-3-605(7)
6. The permittee shall not permit the disposal of waste gasoline in	Rule 335-3-605 (8)
sewers, open containers or in a manner that would result in evaporation to the atmosphere.	
Compliance and Performance Test Methods and Procedures	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Emission Monitoring	
1. The permittee shall inspect the bulk plant during each loading and unloading of tank truck or trailer for visible liquid leaks.	Rule 335-3-1605
Recordkeeping and Reporting Requirements	
 Records of the monthly throughput from the bulk gasoline plant shall be maintained 	Rule 335-3-1605

Summary Page for Propulsion Engine & Launch Vehicle System Testing

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
RP-1	RP-1 Engine Testing	PM	N/A	N/A
RP-1	RP-1 Engine Testing	SO ₂	N/A	N/A
RP-1	RP-1 Engine Testing	NOx	N/A	N/A
RP-1	RP-1 Engine Testing	СО	N/A	N/A
RP-1	RP-1 Engine Testing	VOC	N/A	N/A
SRM	Solid Rocket Motor Testing	PM	N/A	N/A
SRM	Solid Rocket Motor Testing	SO ₂	N/A	N/A
SRM	Solid Rocket Motor Testing	NOx	N/A	N/A
SRM	Solid Rocket Motor Testing	СО	N/A	N/A
SRM	Solid Rocket Motor Testing	VOC	N/A	N/A
HPP	Hybrid Rocket Motor Testing	PM	N/A	N/A
HPP	Hybrid Rocket Motor Testing	SO ₂	N/A	N/A
HPP	Hybrid Rocket Motor Testing	NOx	N/A	N/A
НРР	Hybrid Rocket Motor Testing	СО	N/A	N/A
HPP	Hybrid Rocket Motor Testing	VOC	N/A	N/A
RLF	Radiant Lamp Facility	PM	N/A	N/A
RLF	Radiant Lamp Facility	SO ₂	N/A	N/A
RLF	Radiant Lamp Facility	NOx	N/A	N/A
RLF	Radiant Lamp Facility	СО	N/A	N/A
RLF	Radiant Lamp Facility	VOC	N/A	N/A

Provisos for Propulsion Engine & Launch Vehicle System Testing

Federally Enforceable Provisos	Regulations
Applicability	
1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
2. The Propulsion Engine and Lauch System Testing is subject to the applicable requirements of 40CFR Part 63 Subpart PPPPP, "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Standards". These test stands are classified as existing engine test cell stands and do not have to meet the requirements of Subpart PPPPP and Subpart A.	40CFR PART 63 SUBPART PPPPP
Emission Standards	
1. These operations are not subject to any standards other than the applicable standards contained in the general provisos.	N/A
Compliance and Performance Test Methods and Procedures	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Emission Monitoring	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Recordkeeping and Reporting Requirements	
1. These sources are subject to no additional specific requirements other than those listed in the general permit provisos.	N/A

Summary Page for Air Stripper

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
A-01	Air Stripper	VOC	N/A	N/A
A-01	Air Stripper	HAPs	N/A	N/A

Provisos for Air Stripper

Fed	lerally Enforceable Provisos	Regulations
App	olicability	
1.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
Em	ission Standards	
1.	This operation is not subject to any standards other than the applicable standards contained in the general provisos.	N/A
Cor	mpliance and Performance Test Methods and Procedures	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Em	ission Monitoring	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Rec	cordkeeping and Reporting Requirements	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A

Summary Page for Sand Blasting

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4745 - Fugitive	Building 4745 Sand Blasting	PM	N/A	N/A
4745 - Fugitive	Building 4745 Sand Blasting	Opacity	See General Proviso 29	Rule 335-3-401(1)

Provisos for Sand Blasting

Fed	lerally Enforceable Provisos	Regulations
App	olicability	
1.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603
Em	ission Standards	
1.	This operation is not subject to any standards other than the applicable standards contained in the general provisos.	N/A
Cor	mpliance and Performance Test Methods and Procedures	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Em	ission Monitoring	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A
Rec	cordkeeping and Reporting Requirements	
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A

Summary Page for Grit Blaster

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission Point #	Description	Pollutant	Emission limit	Regulation
4760	Building 4760 Grit Blaster w/ Cyclone	PM	$E = 3.59(P)^{0.62}$	Rule 335-3-404
4760	Building 4760 Grit Blaster w/ Cyclone	Opacity	N/A	N/A



Provisos for Grit Blaster

Fed	lerally Enforceable Provisos	Regulations	
App	plicability		
1.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating permits."	Rule 335-3-1603	
Em	ission Standards		
1.	These operations are not subject to any standards other than the applicable standards contained in the general provisos.	N/A	
Cor	mpliance and Performance Test Methods and Procedures		
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A	
Em	ission Monitoring		
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A	
Rec	ordkeeping and Reporting Requirements		
1.	This source is subject to no additional specific requirements other than those listed in the general permit provisos.	N/A	

Appendix A – Small Natural Gas Boilers

Building Number	Unit #	Rated Capacity (MMBTU/hr)
4209	4209-01	2.144
4209	4209-02	2.144
4491	4491-EX-03	1.68
4708	4708-E8-02	1.825
4718	4718-EX-01	5.10
4776	4776-EX-01	1.25

Appendix B - Small Fuel Oil Boilers

Building	TT 14 #	Rated Capacity
Number	Unit #	(MMBTU/hr)
4675	4675-999-01	5.40
4675	4675-999-02	5.40
4675	4675-999-03	5.40
N/A	Portable Boiler 1	8.37
N/A	Portable Boiler 2	4.185
N/A	Portable Boiler 3	0.84
N/A	Portable Boiler 4	2.092

Appendix C - Fuel Oil Boilers

Building Number	Unit #	Rated Capacity (MMBTU/hr)
4567	4567-BR-01	14.20
4567	4567-BR-02	12.60
4567	4567-BR-03	12.555
4660	4660-999-01	12.60
4660	4660-999-02	12.60
4660	4660-999-03	12.60

Appendix D – Emergency Diesel Generators

Building		Rated Capacity
Number	Unit #	(bhp)
4208	DQKAB-	
	5761991	2,919
4250	60REOZJC	80.4
4601	DSKAB	27.10